

United States Patent and Trademark Office

UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.usplo.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/761,257	01/21/2004	Kevin Austin O'Dea	DP-309754	2573
7590 07/01/2005			EXAMINER	
Scott A. McBain			SCHWARTZ, CHRISTOPHER P	
Delphi Technologies, Inc. Legal Staff / Mail Code: 480-410-202			ART UNIT	PAPER NUMBER
P.O. Box 5052			3683	
Troy, MI 48007-5052			DATE MAILED: 07/01/2005	

Please find below and/or attached an Office communication concerning this application or proceeding.

2
_

	Application No.	Applicant(s)				
Office Action Comments	10/761,257	O'DEA ET AL.				
Office Action Summary	Examiner	Art Unit				
	Christopher P. Schwartz	3683				
The MAILING DATE of this communication appears on the cover sheet with the correspondence address Period for Reply						
A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION. - Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication. - If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely. - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication. - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).						
Status						
1) Responsive to communication(s) filed on <u>09 M</u>	1) Responsive to communication(s) filed on 09 March 2005.					
2a)⊠ This action is FINAL . 2b)□ This						
3) Since this application is in condition for allowar	Since this application is in condition for allowance except for formal matters, prosecution as to the merits is					
closed in accordance with the practice under E	closed in accordance with the practice under Ex parte Quayle, 1935 C.D. 11, 453 O.G. 213.					
Disposition of Claims						
4) Claim(s) <u>1-9</u> is/are pending in the application.						
	4a) Of the above claim(s) is/are withdrawn from consideration.					
5) Claim(s) is/are allowed.						
6)⊠ Claim(s) <u>1-9</u> is/are rejected.						
7) Claim(s) is/are objected to.	7) Claim(s) is/are objected to.					
8) Claim(s) are subject to restriction and/o	r election requirement.					
Application Papers						
9)☐ The specification is objected to by the Examine	er.					
10) The drawing(s) filed on is/are: a) accepted or b) objected to by the Examiner.						
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).						
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).						
11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.						
Priority under 35 U.S.C. § 119						
12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f). a) All b) Some * c) None of: 1. Certified copies of the priority documents have been received. 2. Certified copies of the priority documents have been received in Application No 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).						
* See the attached detailed Office action for a list Attachment(s)	of the certified copies not receive					
1) Notice of References Cited (PTO-892) 2) Notice of Draftsperson's Patent Drawing Review (PTO-948) 3) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date	4) Interview Summary Paper No(s)/Mail Da 5) Notice of Informal P 6) Other:	(PTO-413) te: atent Application; PTQ-952)				

o./Mail Date 4

Application/Control Number: 10/761,257 Page 2

Art Unit: 3683

DETAILED ACTION

Applicant's amendment filed 3/9/05 has been received and considered. Claims
 1-9 are pending.

Claim Objections

2. Claims 1-9 objected to because of the following informalities: Claim 1 the identifier is wrong. It should be (amended). Appropriate correction is required.

Claim Rejections - 35 USC § 112

- 3. The following is a quotation of the second paragraph of 35 U.S.C. 112:
 The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.
- 4. Claim 6 rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 6 the phrases "second pumping fluid..." and "second discontinuing the pumping..." are not clearly understood.

Claim Rejections - 35 USC § 103

- 5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
 - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 6. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein

Art Unit: 3683

were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

Page 3

7. Claims 1-9 are rejected under 35 U.S.C. 103(a) as being unpatentable over Pueschel et al. '126 in view of Itoh et al. '995 and Kollers et al. '730 or Busch et al. '033.

Regarding claim 1 Pueschel shows a brake system similar to applicant's, as is readily apparent from the drawings. The bypass valve may still be considered to be USV1 or USV2.

Pueschel et al. lacks specifically mentioning when the pump is shut off.

Noises due to the operation of the pump and the shuttling of the valves between open and closed positions is an old and well known problem in the art. It is therefore desirable to limit unnecessary or excessive operations of these components to reduce noise. Such may be the case when the pump is functioning during ABS or during traction or stability control routines, when the brake pressures in the wheel cylinders are repeatedly increased, maintained, or reduced for specific periods of time.

The reference to Itoh discloses in column 1 lines 45-50 that noise may be reduced by controlling operation of the pump motor and with inlet and changeover valve positions. See also lines 15-16 of col. 2 of this reference.

The reference to Kollers in column 4 lines 57-65 teach that at the end of the traction control the pump motor is switched off and the pressure control valve assembly

is open. In col 5 it is stated that noise reduction can be reduced through control of the valves and operation of the pump.

The reference to Busch et al. In col. 2 lines 24-32 also discloses that noise control may be effected by using different pump delivery rates that are adapted to the opening/closing characteristics of the particular valves

The examiner maintains the position that one having ordinary skill at the time of the invention would have found it obvious to have applied the teachings of Itoh and Kollers to the device of Pueschel et al. '126 to reduce the noise associated with pump operation when the device operates in one of the aforementioned stability control braking modes.

Due to the striking similarity between applicants system and that of Pueschel et al. and Itoh et al limitations of claims 2-5 are considered to be an obvious variation to Pueschel et al. as modified, since the valving arrangements of Pueschel et al. and Itoh et al. are obviously interchangeable.

Response to Arguments

8. Applicant's arguments filed 3/9/05 have been fully considered but they are not persuasive. The examiner maintains the position that it is known to control the on/off operating times of the pump and/or the closing and opening times of the valves during "controlled braking events", as broadly claimed, to limit the amount of noise generated by these brake components. The references cited by the examiner, not applied, both previous and new teach this notoriously well known concept. The examiner

recommends that applicant's representative review the references to Katinas et al.,
Burgdorf, Busch et al. and Takagi et al. In their entirety.

Conclusion

9. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

- 10. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. The references cited have been cited for showing systems that use pump and/or valve control to reduce noise.
- 11. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Christopher P. Schwartz whose telephone number is 571-272-7123. The examiner can normally be reached on M-F 9:30-6:00.

Application/Control Number: 10/761,257 Page 6

Art Unit: 3683

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Dave Bucci can be reached on 703-308-3668. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Cps 6/25/05